

What is claimed is:

1. A rolling element interference preventer for a guide device having a continuous circulation path and a plurality of rolling elements rolling at regular intervals in the continuous circulation path, wherein the rolling element interference preventer prevents the rolling elements from interfering with each other, and

wherein the rolling element interference preventer is formed of a thermoplastic resin elastomer having a physical property in accordance with an expression, $(A \times B) \div C \geq 18$, where A represents a 10% elongation stress, B represents a tensile strength, and C represents a bending modulus of elasticity.

2. The rolling element interference preventer according to claim 1, wherein the thermoplastic resin elastomer has the 10% elongation stress A of 60 to 200kgf/cm², the tensile strength B of 340 to 460kgf/cm², and the bending modulus of elasticity C of 1000 to 5000kgf/cm².

3. The rolling element interference preventer according to claim 1, wherein a coefficient of water absorption for the thermoplastic resin elastomer is not more than 1.5wt%.

4. The rolling element interference preventer according to claim 1, wherein a swelling factor of the thermoplastic

resin elastomer is not more than 3%.

5. The rolling element interference preventer according to claim 1, wherein a tensile strength retention of the thermoplastic resin elastomer is not less than 70% after ten days in 100°C boiling water immersion test.

6. A guide device comprising:
a track rail having a rolling path;
a sliding board having a rolling groove opposed to the rolling path and moving along the track rail;

a plurality of rolling elements rolling with a load applied between the rolling path and the rolling groove; and

a rolling element interference preventer including a flexible resin connector having a plurality of interposing portions interposed between each rolling elements, and a connecting portion for connecting each interposing portions,

wherein the rolling element interference preventer is formed of a thermoplastic resin elastomer having a physical property in accordance with an expression, $(A \times B) \div C \geq 18$, where A represents a 10% elongation stress, B represents a tensile strength, and C represents a bending modulus of elasticity.

7. The guide device according to claim 6, wherein the resin connector carries the rolling elements in an arranged

state and rollably by the interposing portions and the connecting portion.

8. The guide device according to claim 6, wherein the rolling elements are balls, and the thermoplastic resin elastomer has the 10% elongation stress A of 60 to 100 kgf/cm², the tensile strength B of 340 to 400 kgf/cm², and the bending modulus of elasticity C of 1000 to 2000 kgf/cm².

9. The guide device according to claim 6, wherein the rolling elements are rollers, and the thermoplastic resin elastomer has the 10% elongation stress A of 80 to 200 kgf/cm², the tensile strength B of 380 to 460 kgf/cm², and the bending modulus of elasticity C of 2000 to 5000 kgf/cm².

10. A guide device comprising:

a screw axis having a helical rolling path;

a nut having a helical rolling groove opposed to the helical rolling path;

a plurality of balls rolling between the helical rolling path and the helical rolling groove; and

a ball interference preventer,

wherein the ball interference preventer comprises a plurality of spacers interposed between each balls, and

wherein the ball interference preventer is formed of a

thermoplastic resin elastomer having a physical property in accordance with an expression, $(A \times B) \div C \geq 18$, where A represents a 10% elongation stress, B represents a tensile strength, and C represents a bending modulus of elasticity.